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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/051,860 | 01/16/2002 | Eric Bergman | 263/169 P01-0007 | 1640 |

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| EXAMINER |
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STINSON, FRANKIE L

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| ART UNIT | PAPER NUMBER |
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1746

DATE MAILED: 09/11/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,860

Applicant(s)

BERGMAN, ERIC

Examiner

FRANKIE L. STINSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 19-28 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-18 are, drawn to an apparatus for processing a workpiece, classified in class 134, subclass ~~25.4~~^{25.4}.
- II. Claims 19-28 are, drawn to a method for processing a workpiece, classified in class 134, subclass 001.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another apparatus such as one without at least one heater, and without one or more liquid outlets.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with MR. Ohriner on 12/19/02 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-18.

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Affirmation of this election must be made by applicant in replying to this Office action.

Claims 18-28 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

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7. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 4, lines 1-2, there is no antecedent basis for the phrase "the sonic energy associated with the liquid outlets"

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-5, 7 and 8 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Satoh (U. S. Pat. No. 6,235,112)

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh'112 in view of either Japan 5-13398 or Japan 4-125927.

Claim 6 defines over Satoh'112 only in the recitation of the liquid reservoir being heated. Japan'298 and Japan'927 disclose the arrangement in a reservoir where the liquid is heated. It therefore would have been obvious to one having ordinary skill in the art to

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modify the device of Satoh'112, to have a the process fluid heated in the reservoir as taught by either Japan'398 or Japan'927, for the purpose of enhancing the processing of the workpiece. Re claim 9, Japan'398 discloses the recirculation line. Re claim 11, as proposedly modified, by Japan'398 or Japan'927, Satoh'112 discloses the spraying of the heated liquid onto the workpiece.

12. Claims 10, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh'112 in view of either EPO 782,177 or Lorimer.

Claim 10 defines over Satoh only in the recitation of the rotor. Lorimer and EPO'177 disclose the rotor. It therefore would have been obvious to one having ordinary skill in the art to modify the device of Satoh, to include a rotor as taught by either EPO'177 or Lorimer, for the purpose of ensuring that the entire surface of the substrate is processed evenly. Claim 12 defines over Satoh'112 only in the recitation of the means for controlling the thickness of the liquid. EPO'177 and Lorimer disclose an arrangement of controlling the thickness of a layer of processing liquid. It therefore would have been obvious to one having ordinary skill in the art to modify the device of Satoh'112 to have the thickness of the process liquid controlled as taught by either Lorimer or EPO'177, for the purpose of ensuring that the substrate's surface is processed evenly. Re claim 13, Satoh disclose the controlling of the flow of liquid by the valve 16. Re claim 14, Satoh disclose the spray nozzle. To have a plurality is deemed to be an obvious extension of the teachings Satoh. Re claim 15, Satoh'112 disclose the rotor as proposedly modified by either Lorimer or EPO'177.

13. Claims 16-18 are allowed.

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14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Japan'271, Matsukawa et al., Ohmi et al., Nakajima et al., Vaartsra, Yoshitani et al., Japan'144640, Netsu et al., Kashiwase et al., Koizumi et al., EPO'596, Japan'980, note the workpiece processing means.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (703) 308-0661. The examiner can normally be reached during the first week of the pay-period M-F from 5:30 a.m. to 3:00 p.m. and during the second week of the pay-period from Tu-Th second from 5:30 a.m. to 3:00 p.m. and on Fri. from 5:30 a.m. to 2:00 p.m. Alternating Mondays off.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (NON-FINAL REJECTION STATUS) and (703) 872-9311 (AFTER-FINAL REJECTION STATUS).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Any inquiry for missing parts of this Office Action (copies of references, pages, forms etc.), contact Office Manager Ms. Sandra Sewell (703) 308-0661.

fls


FRANKIE L. STINSON
Primary Examiner
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